

Unit 2 Creating Systems to Manage Information 2019



**Level 3 National in
Information Technology**

**Additional Sample Assessment
Material**

**Part A
Example Solution**

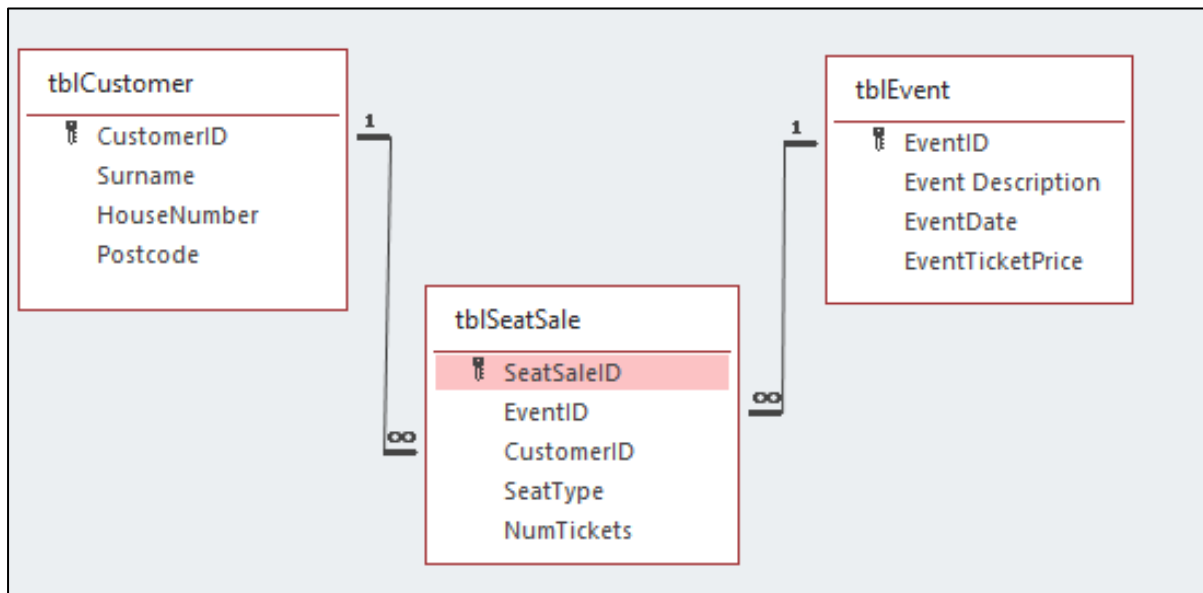
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Introduction

This solution shown is **one** example only. It is important to read the guidance with each activity. No assumption is made that a method that differs from the solution shown is incorrect.

Activity 1 Database Relationship Screenprint



Activity 2 – Table Structures and Validation

Table Structures

tblCustomer	
Field Name	Data Type
CustomerID	Number
Surname	Short Text
HouseNumber	Short Text
Postcode	Short Text

tblEvent	
Field Name	Data Type
EventID	AutoNumber
Event Description	Short Text
EventDate	Date/Time
EventTicketPrice	Currency

tblSeatSale	
Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
CustomerID	Number
SeatType	Short Text
NumTickets	Number

Table Validation

Presence and Length Check

Surname	Short Text
General	Lookup
Field Size	20
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	You must enter the customer's surname

Value Lookup or Range Check

NumTickets	Number
General	Lookup
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	Between 1 And 8
Validation Text	Must be at least 1 ticket bought and no more than 8

Table Lookup

tblSeatSale	
Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
General	Lookup
Display Control	Combo Box
Row Source Type	Table/Query
Row Source	SELECT [tblEvent].[EventID], [tblEvent].[Event Description], [tblEvent].[Event
Bound Column	1
Column Count	4
Column Heads	No
Column Widths	1.35cm;4.974cm;1.799cm;2.408cm
List Rows	16
List Width	10.529cm
Limit To List	Yes

Format Check

tblCustomer	
Field Name	Data Type
HouseNumber	Short Text
Postcode	Short Text
General	Lookup
Field Size	7
Format	
Input Mask	> LL0\ 0LL
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	You must enter the customer's postcode
Required	No

Activity 3

Queries

Query a

Create a query to display an alphabetically sorted list of the events running on the 20th and 21st of December. It must show event description and event ticket price only.

qry_AlphabeticalEvents

tblEvent

- *
- EventID
- Event Description
- EventDate
- EventTicketPrice

Field:	Event Description	EventTicketPrice	EventDate
Table:	tblEvent	tblEvent	tblEvent
Sort:	Ascending		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:			Between #20/12/2019# And #21/12/2019#
or:			

qry_AlphabeticalEvents

Event Description	EventTicket
Sing A Long Christmas Extravaganza	£10.00
The Polar Express Extravaganza	£10.00
*	£0.00

Query b

Create a query that will calculate:

- the number of table tickets sold
- the income the tickets sold would generate.

Display:

- the event description
- the number of table seat tickets sold
- the income generated.

qry2Income

tblEvent	tblSeatSale
* EventID Event Description EventDate EventTicketPrice	* SeatSaleID EventID CustomerID SeatType NumTickets

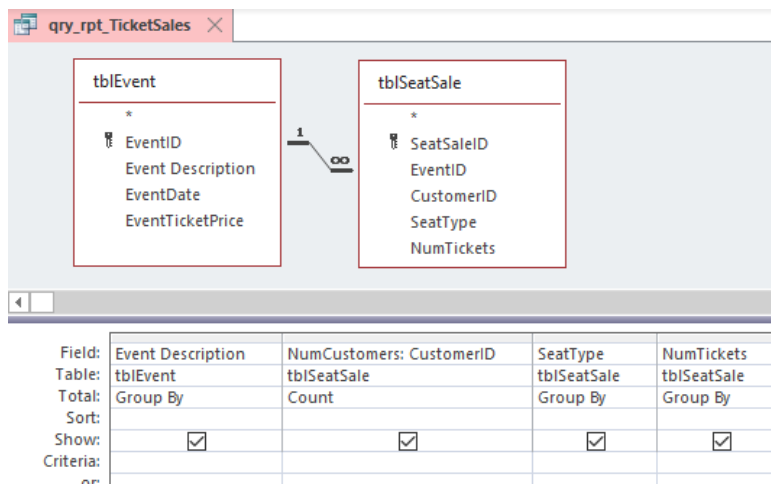
Field:	Event Description	TableTicketsSold: NumTickets	Income: [TableTicketsSold]*[EventTicketPrice]	EventTicketPrice	SeatType
Table:	tblEvent	tblSeatSale		tblEvent	tblSeatSale
Total:	Group By	Sum	Expression	Group By	Group By
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Criteria:					"table"
or:					

qry2Income

Event Description	TableTicketsSold	Income
Christmas Songtime	2	£20.00
Home Alone	4	£50.00
The Polar Express	4	£60.00

Report

Example 1



Report Header				
Ticket Sales				
Page Header				
Event Description	Number of Customers	Table Seats	Non Table Seats	Total Tickets
Event Description Header				
Event Description	[numCustor	pe]="table",	pe]="no table	n([NumTick
Detail				
Page Footer				

Calculation for table seats

`=Sum(IIf([seattype]="table",[numtickets],0))`

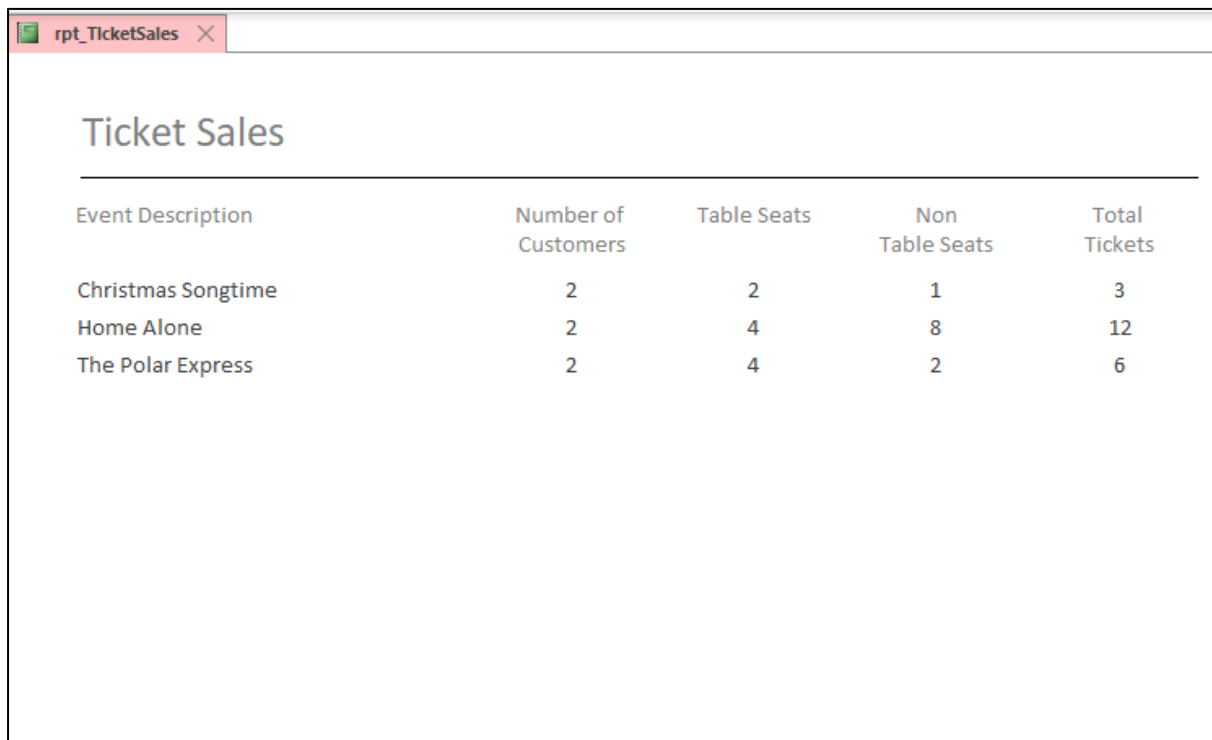
Calculation for no table seats

`=Sum(IIf([seattype]="no table",[numtickets],0))`

Calculation for total tickets

`=Sum([NumTickets])`

Many different ways to achieve. Could use grouping on Event Description etc. Any method that shows what we want is valid.



Event Description	Number of Customers	Table Seats	Non Table Seats	Total Tickets
Christmas Songtime	2	2	1	3
Home Alone	2	4	8	12
The Polar Express	2	4	2	6

Presentation of report cannot be marked from screenprint. Need to see actual report. Report here for illustration purposes only.

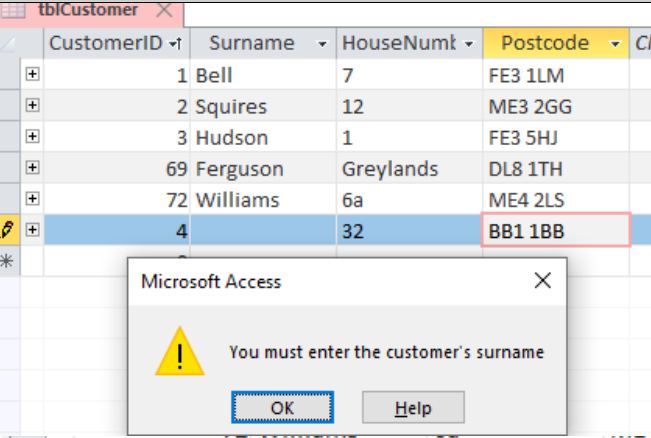
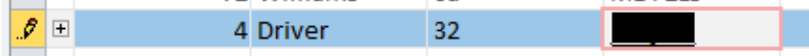
Example 2

rptTicketSales_example2	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	
Report Header	
Page Header	
Ticket Sales	
EventID Header	
Event Description	
Number of Customers:	=Count([customerID])
Total Tickets Sold	=Sum([NumTickets])
Seat Type	Tickets Sold
Detail	
SeatType	NumTickets
Page Footer	
Report Footer	

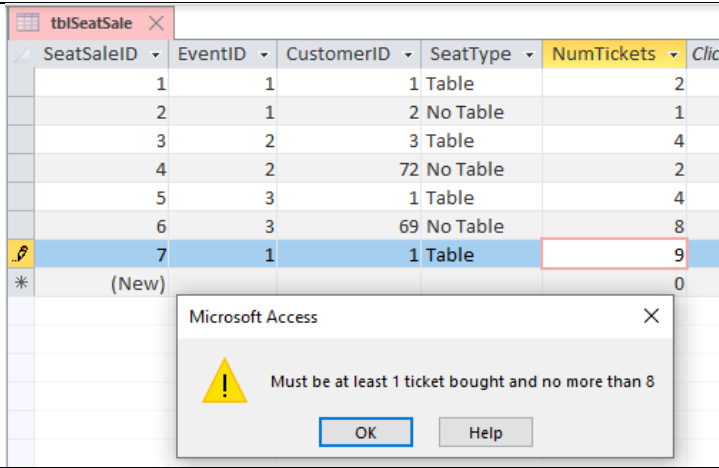
rptTicketSales_example2	
Ticket Sales	
Christmas Songtime	
Number of Customers:	2
Total Tickets Sold	3
Seat Type	Tickets Sold
No Table	1
Table	2
The Polar Express	
Number of Customers:	2
Total Tickets Sold	6
Seat Type	Tickets Sold
No Table	2
Table	4
Home Alone	
Number of Customers:	2
Total Tickets Sold	12
Seat Type	Tickets Sold
No Table	8
Table	4

Activity 4 - Testing

Screenprints may be on the small side here. Learners can put the screenshots after the table or use A3.

Test No	type test	Add suitable test data	Add the results you would expect to get from a fully working system	Add screenprint(s) of the results of this test carried out on your database. Ensure you show the test data used in the screenprint(s)	Only complete this column if the results are not as expected • Explain the error If you correct the error explain how you have done it including a screenprint
1	R	CustomerID:4 Surname: blank HouseNumber:32 Postcode: BB1 1BB	An error message telling the user the surname is required		
2	R	CustomerID:4 Surname:Driver HouseNumber:32 Postcode 11B B11	No error message but the user will not be able to add a character where a number should be or a number where a character should be. The character will not be input		

3	X	SeatSaleID:Autonumber EventID:4 CustomerID:69 SeatType: Table NumTickets:1	Error message saying they must select an item from the list.	
4	R	SeatSaleID:Autonumber EventID:1 CustomerID:1 SeatType:both NumTickets:1	Error message saying they must select an item from the list.	
5	X	SeatSaleID:Autonumber EventID:1 CustomerID:1 SeatType:Table NumTickets:0	Error message telling the user the input has to be between 1 and 8	

6	X	SeatSaleID:Autonumber EventID:1 CustomerID:1 SeatType:Table NumTickets:9	Error message telling the user the input has to be between 1 and 8		
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Activity 5 – Evaluation

No evaluation example included as these can end up becoming the 'only way' candidates evidence this activity.